

Interstate Transmission Capability

Geothermal Transmission Workshop
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Interstate Available Transfer Capability (ATC)

- Issues
 - What is the capability of the existing interconnections to import out of state resources in 2010 and 2017 to assist in meeting the renewable penetration requirement?
 - Is the California transmission infrastructure (230 kV and below) able to deliver power from the EHV to load centers?

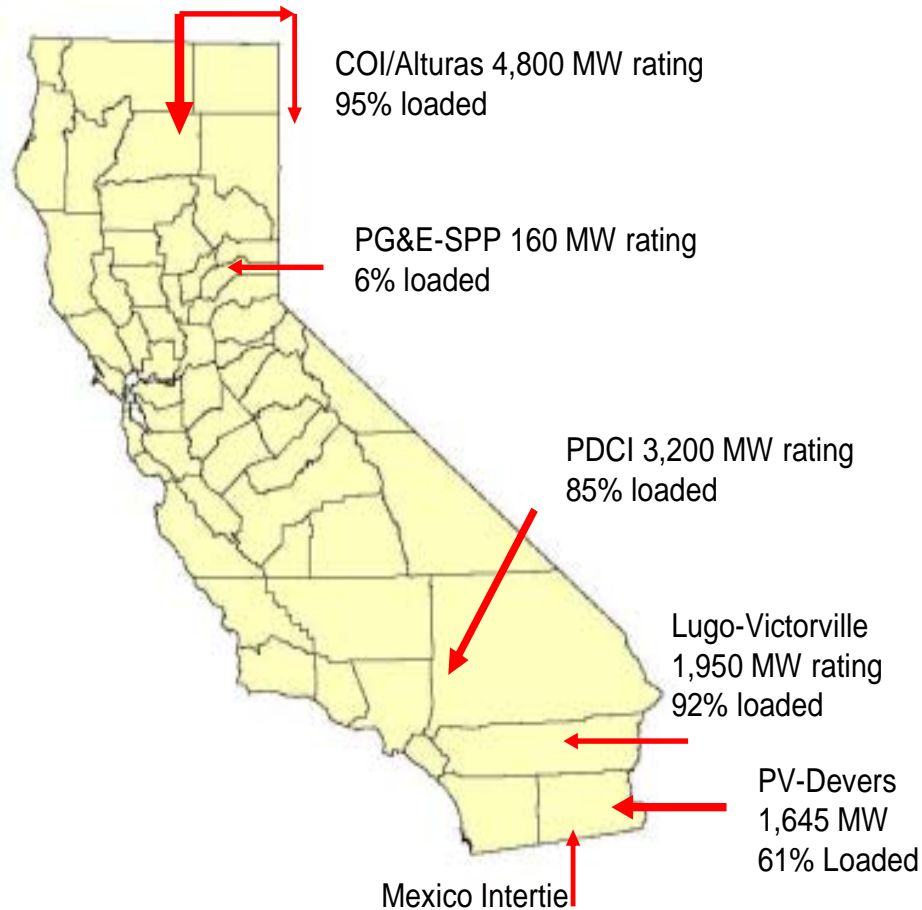
ATC Issues Continued

- What transmission planning studies and transmission developments need to be undertaken?
- Given the projected out-of-state renewable development that is being planned for delivery to the California border, is California able to reliability and economically import this power?

General Observations

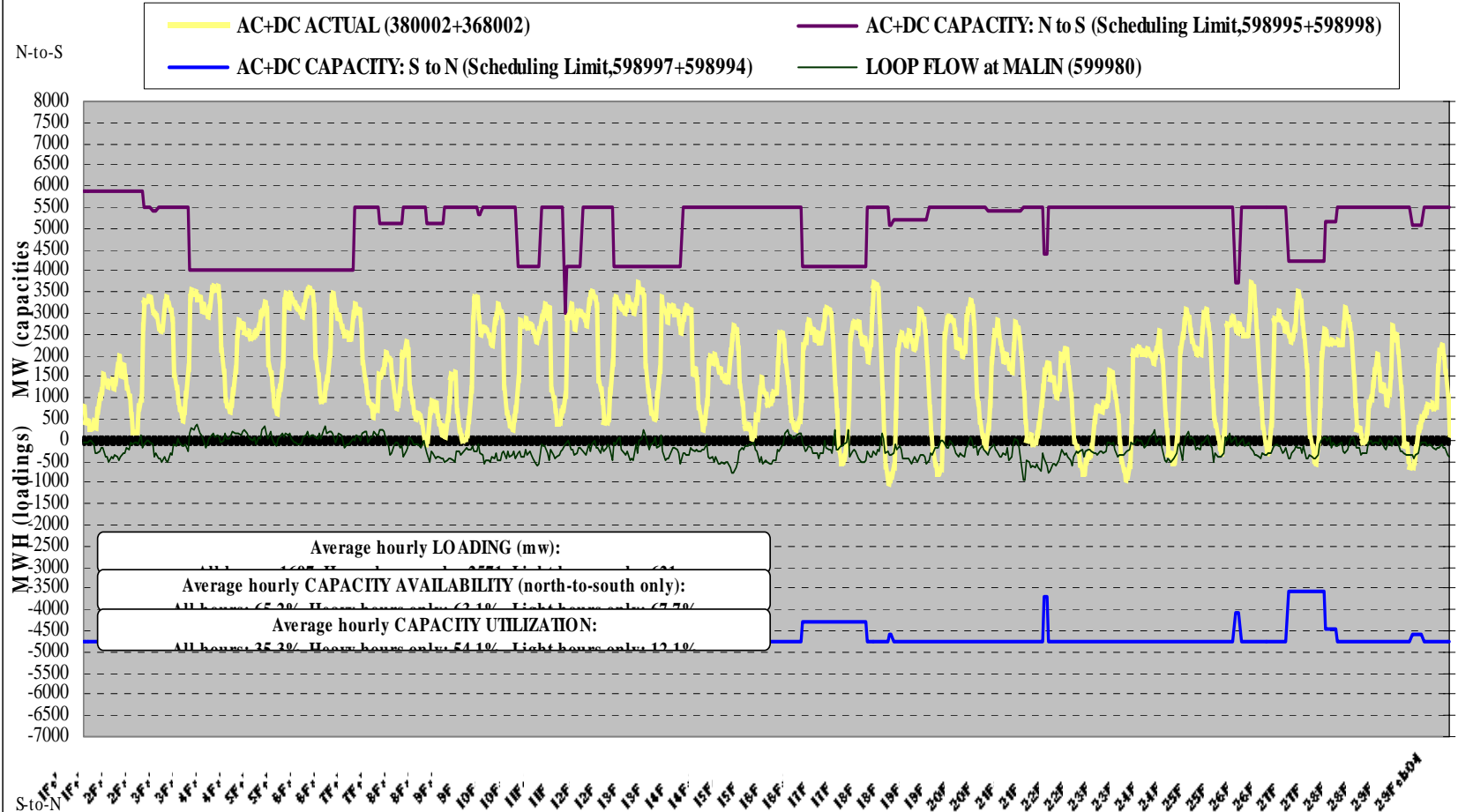
- Historically, the transmission interconnections have not been loaded to their full rating
- However, in the 2010 and 2017 transmission power flows, these interconnections are being loaded to over 90% capacity
- Little room remains for importing new power

Projected 2010 Summer Peak Flows



AC+DC INTERTIE AVAILABILITY & UTILIZATION: 01FEB04 - 29FEB04

ACTUAL LOADINGS and CAPACITIES, BY HOUR



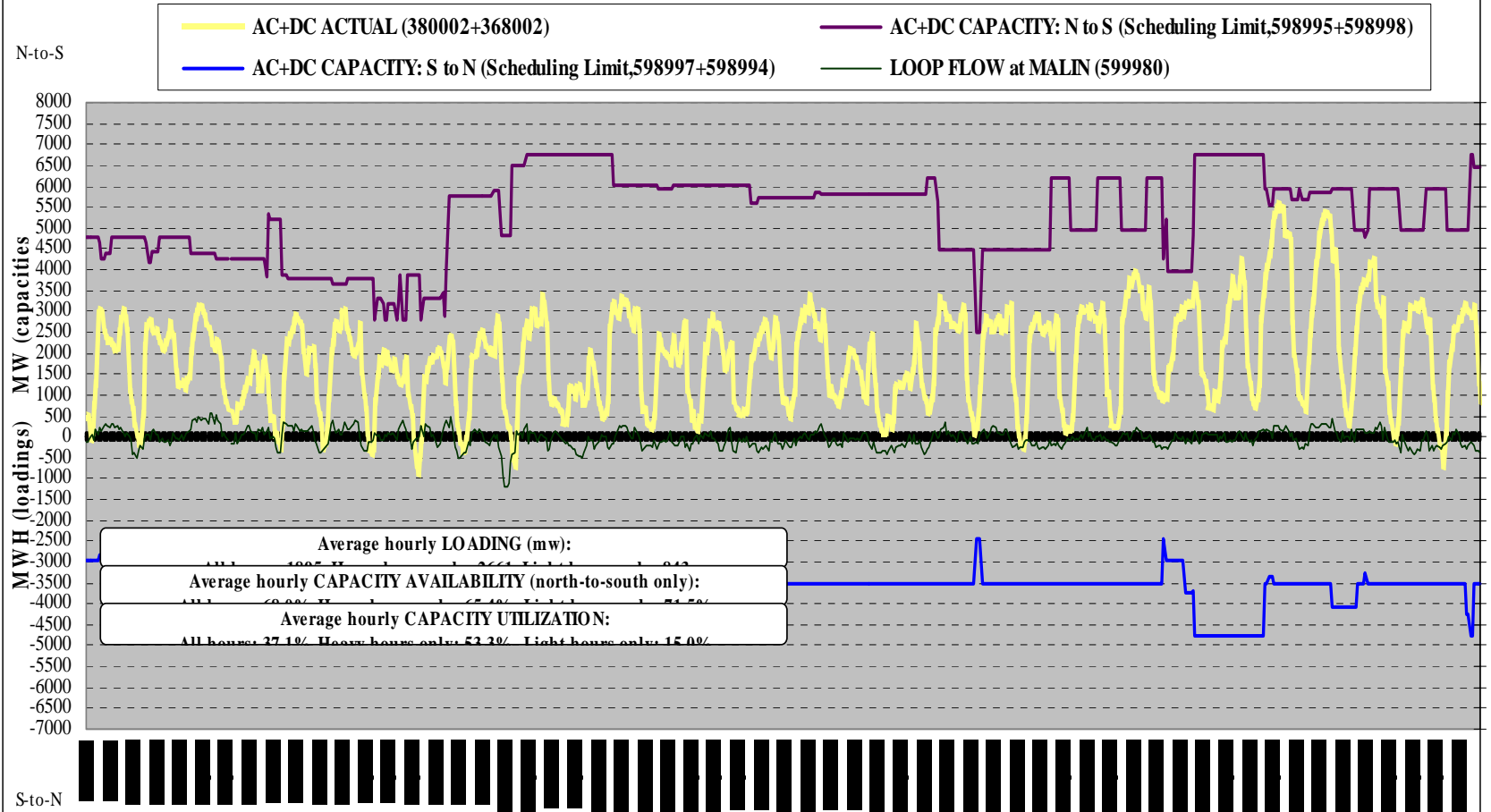
capacity availability = actual capacity/rated capacity; capacity utilization = actual loading/actual capacity

Source: Hourly data via RODS; Capacities are those at COB or NOB and reflect total path scheduling limit

Actuals may exceed scheduling limit as long as conditions remain within North-of-John-Day vs. COI & PDCI operating nomogram limits

AC+DC INTERTIE AVAILABILITY & UTILIZATION: 01APR04 - 30APR04

ACTUAL LOADINGS and CAPACITIES, BY HOUR

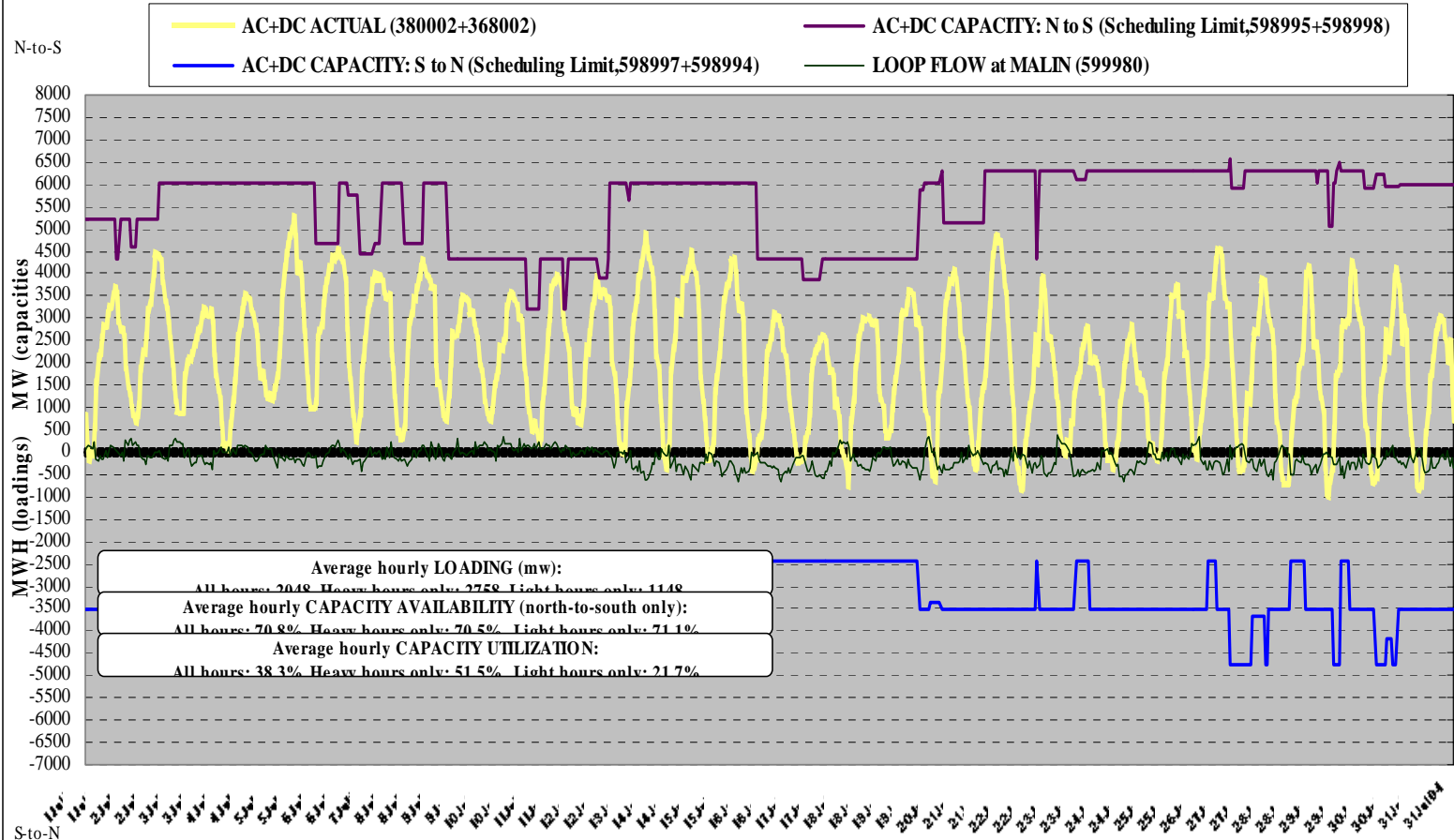


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AC+DC INTERTIE AVAILABILITY & UTILIZATION: 01JUL04 - 31JUL04

ACTUAL LOADINGS and CAPACITIES, BY HOUR

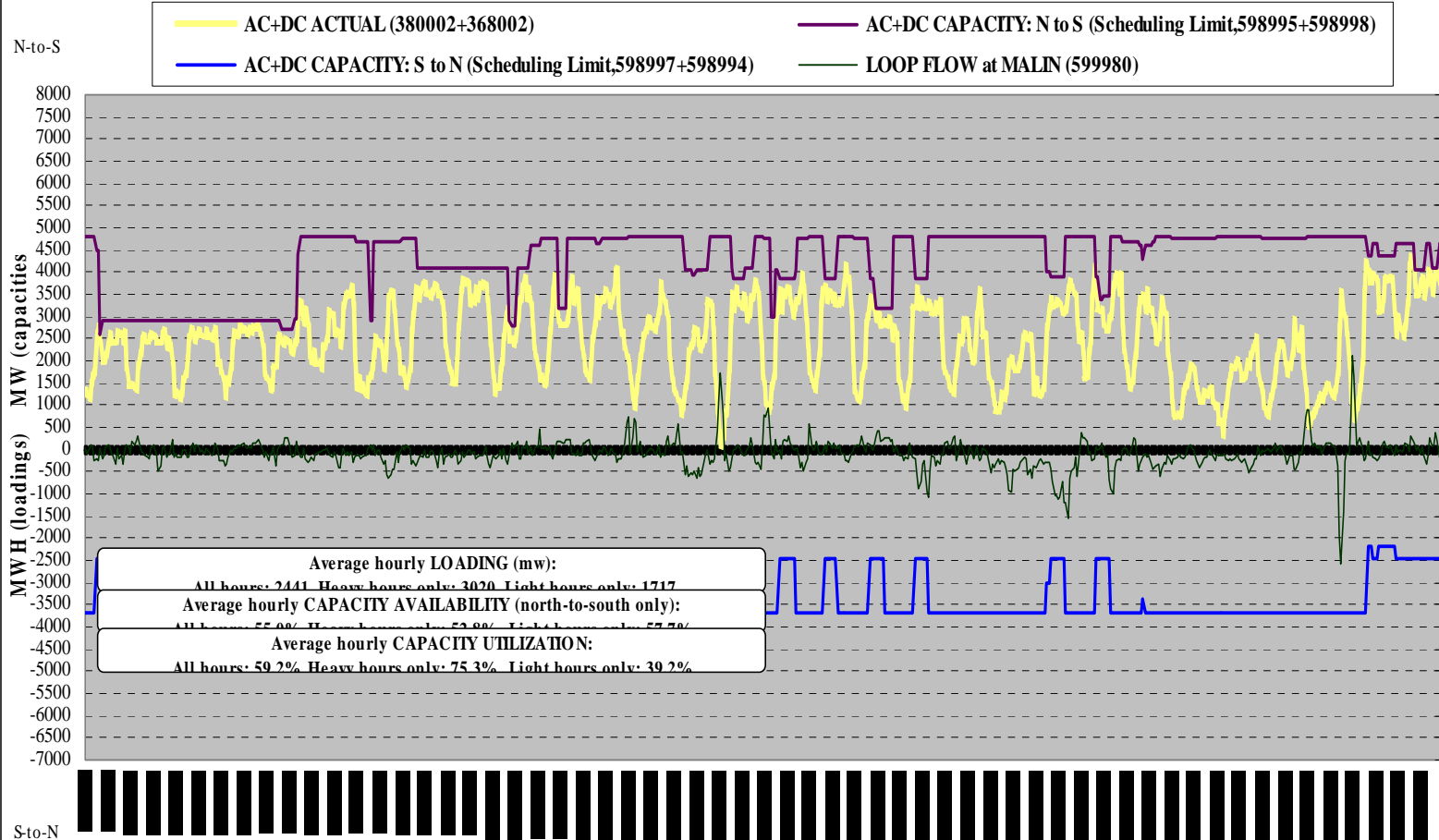


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AC+DC INTERTIE AVAILABILITY & UTILIZATION: 01NOV04 - 30NOV04

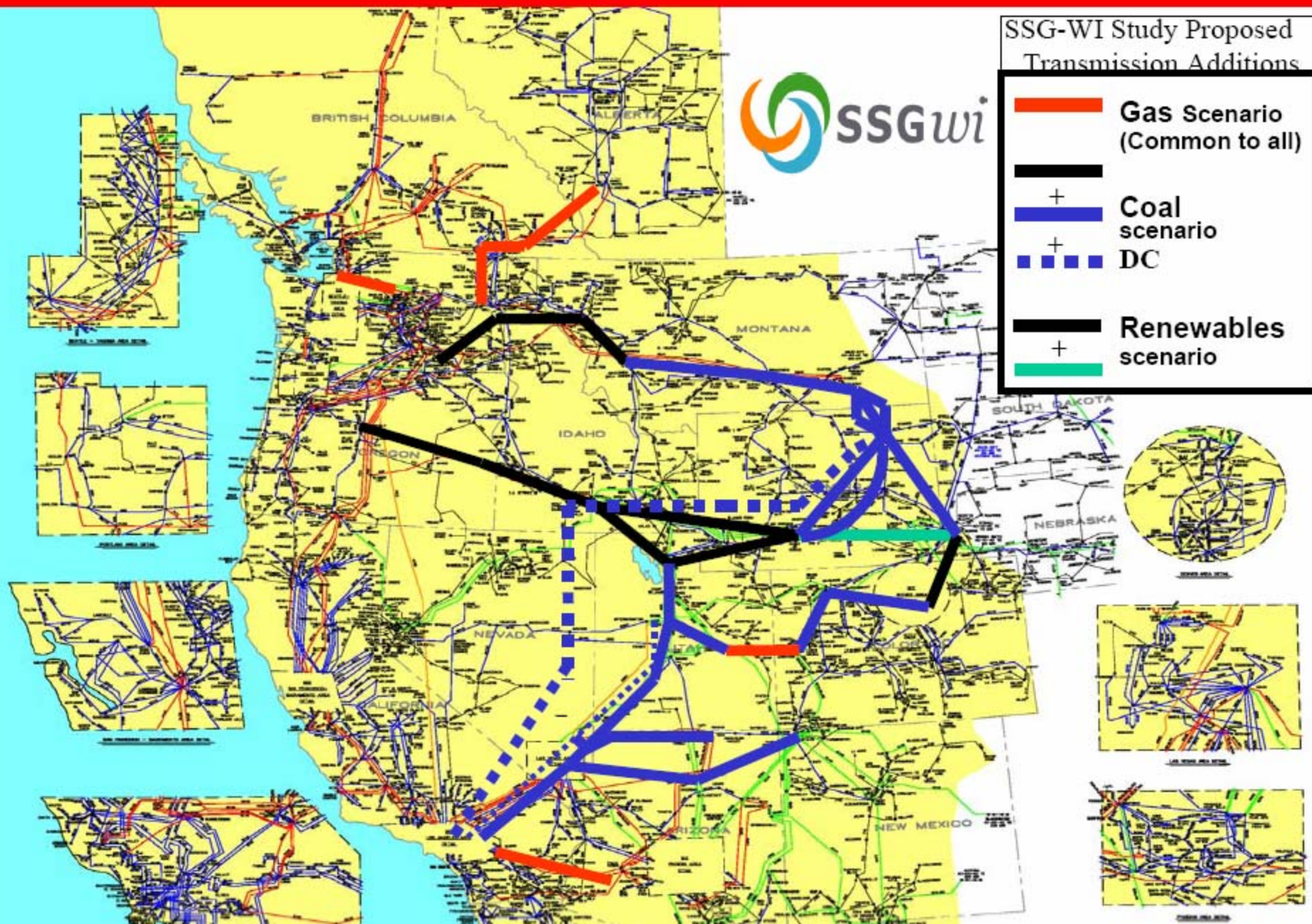
ACTUAL LOADINGS and CAPACITIES, BY HOUR



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Background map courtesy of Western Electricity Coordinating Council



Presentation of Results

- DPC will be presenting its interstate transmission ATC results at the May 9, 2005 IEPR workshop